

Notice of Allowability

Application No.

10/814,916

Examiner

Rebecca L. Anderson

Applicant(s)

KLEINER, BELA

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 10 April 2007.
2. ☒ The allowed claim(s) is/are 4.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☒ Interview Summary (PTO-413), Paper No./Mail Date 20070808
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

DETAILED ACTION

Claim 4 is currently pending in the instant application, is allowable over the prior art of record and has been renumbered as claim 1. Applicants' amendment has overcome the objection to the abstract; has overcome the claim objection and has overcome the 35 USC 112 2nd paragraph rejections.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bela Kleiner on 7 August 2007.

The application has been amended as follows:

1. The page numbers for the specification have been amended to start with 1 and be consecutive.
2. The amendment filed 10 April 2007 was non-complaint, however, the non-compliant amendment would otherwise place the application in condition for allowance, therefore, the examiner has entered the non-compliant amendment and the instant examiner's amendment corrects the non-compliance. Specifically, the following claim listing is provided and presents all of the claims. Clarification of the cancellation of claims 1-3 and 5-9 is made and the markings to show text changes of claim 4 are

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provided to show the changes discussed in the interview of 7 August 2007 compared to original claim 4.

Claims:

1-3. (Cancelled)

4. (Currently Amended) ~~What I claim as my invention; when aqueous ascorbic acid solution or isoascorbic acid solution is brought together with aqueous calcium nitrite solution in a chemical system; the chemical reactions will result in giving nitrogen dioxide, nitric oxide and calcium ascorbate or calcium isoascorbate as products; this gas mixture can be used as raw material or this gas mixture can be further reacted with oxygen giving homogeneous nitrogen dioxide that can be used as final product or this nitrogen dioxide can be dissolved in water (reacts with water) forming nitric acid; the generated gas mixture; nitrogen dioxide, nitric oxide can be separated into their individual components by introducing the gas mixture into water; nitrogen dioxide will react with water forming nitric acid and nitric oxide is collected over water and is ready for further use-~~ A process for preparing nitrogen dioxide, nitric oxide and calcium ascorbate or calcium isoascorbate comprising reacting aqueous ascorbic acid solution or aqueous isoascorbic acid solution with aqueous calcium nitrite in a reaction vessel at a temperature of about 25 °C.

5-9. (cancelled)

Reasons for Allowance

The following is an examiner's statement of reasons for allowance. This invention relates to a process for preparing nitrogen dioxide, nitric oxide and calcium ascorbate or

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calcium isoascorbate comprising reacting aqueous ascorbic acid solution or aqueous isoascorbic acid solution with aqueous calcium nitrite in a reaction vessel at a temperature of about 25 degrees Celsius. The novel and nonobvious aspect of this invention involves the specific reaction conditions. The closest prior art of record which discloses the Ostwald method fails to teach or suggest applicants' instant process.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (571) 272-0696. Mrs. Anderson can normally be reached Monday through Friday from 6:00am until 2:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Rebecca Anderson/
Primary Examiner, AU 1626*

8 August 2007

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